



## More productive bananas in the alkaline soil of Lebanon



I have to confess that when I was a young teenager, I believed (as many people did) that the banana was originally from Central America. This is not surprising since all the banana boxes in our markets were labeled from 'Honduras' or 'Guatemala'...

But that is not so. This delicious fruit, which today has over 1,000 varieties and is grown around the world, is originally from tropical Indo-Malaysia and Australia. It is believed to have been first domesticated in Papua New Guinea.

Historically, the banana was cultivated in Asia, and most certainly Lebanon was a major producer in that ecosystem zone where the banana originated. Traveling through northern Lebanon, I realized how complex it is to get good harvests due to the alkaline condition of the soil. This characteristic (high pH) limits productivity: the average yield obtained by local farmers is only 40 tons of fruit per hectare, even though bananas can produce double that amount.



Banana is a nutritious fruit, but growing it demands a lot of nutrients. Although it can be adapted to different types of soil, it develops even better with good drainage. Unfortunately, those two factors, alkalinity and good drainage, are not usually found together. So, how can this limitation be dealt with?

Alkalinity occurs naturally in the soil in many countries in the Middle East, southern Spain, and certain zones of Brazil and Europe. It tends to be associated with the following conditions: the presence of calcium carbonate; poor soil structure (low water infiltration); a deficiency of micronutrients, in particular zinc and iron; low organic matter; and reduced CEC. To increase the yield and quality of the harvest in alkaline soil, it is necessary to reduce the pH, and to maintain a balance with the elements already available in the soil solution by means of Specialty Plant Nutrition. The source of the fertilizer must be carefully selected to ensure that the components react to produce the desired results. For this reason, we recommend using our specialized product lines Ultrasol Magnum Flex and Ultrasol Magnum Special. In extreme cases, we recommend strongly acidic products such as Ultrasol Magnum P44 and others.

Fortunately, alkalinity is something that can be overcome. Bananas that are properly fertilized thrive in Lebanon—a country with abundant natural treasures to behold. To name just one—have you ever heard of the Cedars of God? These ancient trees can be found in Qadisha, a UNESCO World Heritage site. They are the last remnant of the lush forest that once covered almost all of Lebanon. The Cedars of God are trees of the mountains, divine children who have weathered great harshness through the ages, and who, despite all, yearn to reach for great heights... They truly deserve the honor of their name.